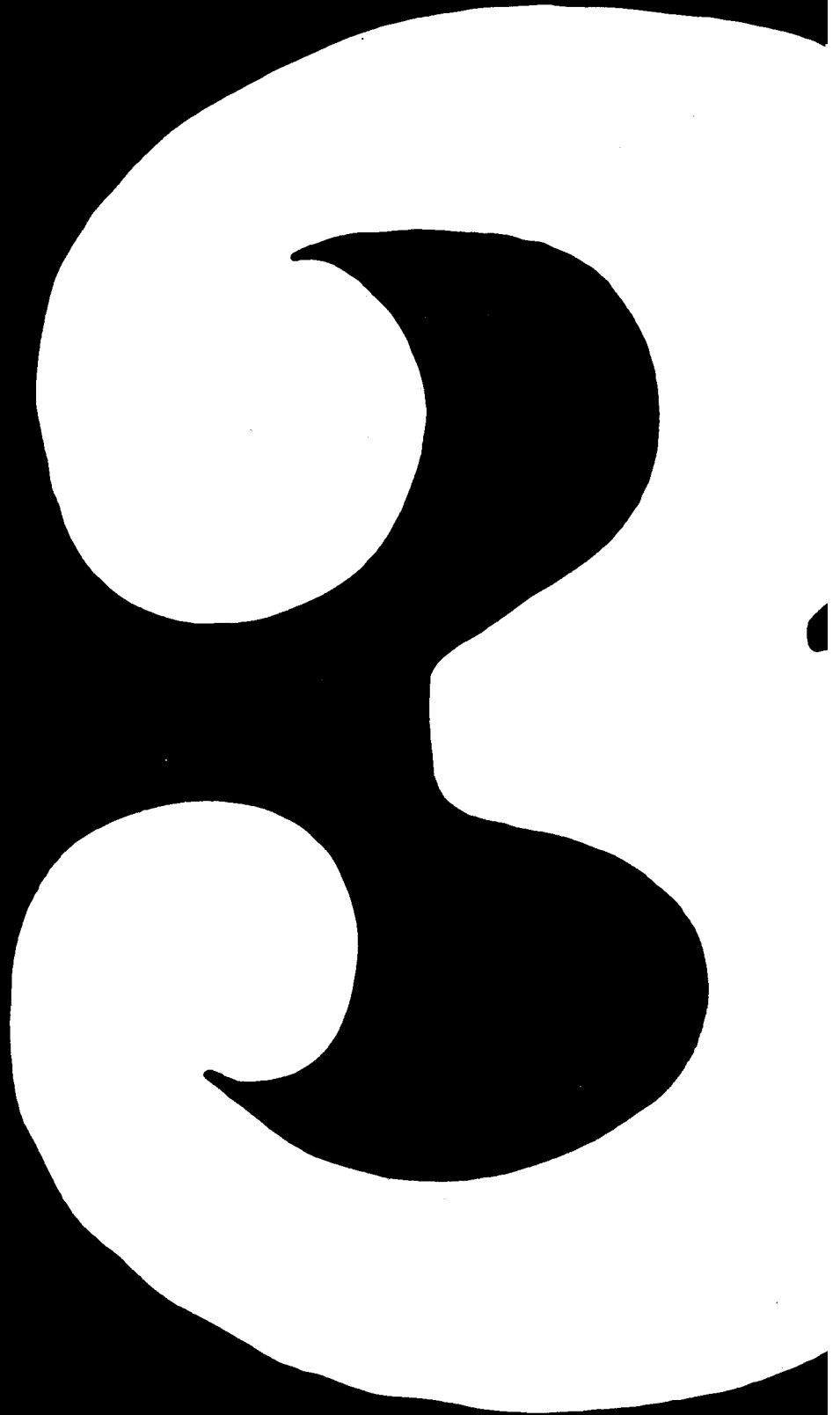


# Traffic Control Studies







## Study Uses and Types

Traffic control studies are designed to obtain information on various traffic problems and usage patterns on an installation. The provost marshal uses various studies to determine present and future needs concerning traffic control and associated traffic programs. By using automatic data processing (ADP) facilities, the storage, interpretation, retrieval, validity and costs of using this information is improved. FM 19-11 discusses ADP programming procedures.

The studies discussed in this section include:

- Traffic Control Devices
- Stop Sign Observance
- Observance of Traffic Signals
- Origin-Destination
- Vehicle Occupancy
- Pedestrian
- Speed
- Speed-Delay

- Motor Vehicle Volume
- Roadway Capacity
- Accident Records
- Parking
- Other Studies.

## Planning

Traffic control studies are used to insure the installation traffic control plan is adequate and provides for safe and efficient movement of traffic.

Traffic movement is an area of consideration in the installation master plan as prescribed in AR 210-20. Continuing traffic control studies improve the flow of information for planning and action between the provost marshal, post engineer, transportation officer and the safety officer.

Traffic studies are required when changes occur in traffic conditions. These might be major (such as a change in mission or relocation of units) or relatively minor (such as addition of a new secondary road or a new building with increased parking problems). The type of change will determine the nature and depth of each study.

Some general planning considerations follow:

- ☐ The public should be informed of the study and its purpose, especially if it will affect their day-to-day routine.
- ☐ An operating station (a team of one or two MPs who collect data) is used in traffic studies. Stations should be checked a minimum of 5 minutes each hour, so supervisors should be provided for every two to eight stations. A coordinator is appointed for the overall study.
- ☐ Each station should have two means of communication, preferably one being telephone, to notify the supervisor of problems or emergencies.
- ☐ Photographic and video techniques, still, aerial and motion, are extremely valuable in analyzing traffic studies. They are very effective in showing before and after views.

## Analyzing Mistakes

The purpose of making a study is to find answers to a problem. The person analyzing study results must guard against mistakes through oversimplifying the results or looking for the easy answer.

Some commonly made mistakes follow:

○ Not evaluating and not exploring all available information.

○ Not accounting for the four types of fluctuations—

1. Long-term trends which are not affected by short-term changes. This is caused by changes in basic factors contributing to a problem.

2. Fluctuations above and below the trend line of a long-term trend caused by the economy or short-term changes.

3. Seasonal changes, caused by the time of day or month affecting volume, speed and accidents.

4. Chance variations (also known as the “spatter effect”) which may cause misinterpretations during short studies.

○ Faulty reasoning in one or more of the following forms:

Unjustified assumption concerning cause and effect. (Just because one event follows another doesn't mean the first event causes the second event.)

● Making generalizations based on averages. Averages are useful in stating typical cases. (For example, icy roads may cause only 2 percent of the total accidents in a year, but on icy days they cause 100 percent of the accident experience.)

● Making generalizations based on specific incidents. (Staggering the work hours of two units may reduce the traffic load, but staggering the hours of all units may increase traffic load, since it reduces the number of car pools.)

● False accuracy. (If two figures, one accurate and the other a guess, are computed together, the result must be considered as probably inaccurate.)